

What is claimed is:

1. A polishing pad useful for polishing a semiconductor substrate, the polishing pad comprising: a polishing layer having a polishing surface, the polishing layer comprising particles disposed in a polymeric matrix, the particles being coated with a material having a surface tension of less than 50 dynes/cm, the coated particles being capable of releasing from the polishing surface during polishing.
2. The polishing pad of claim 1, wherein the polishing pad comprises by weight percent 20 to 90 coated particles.
3. The polishing pad of claim 1, wherein the coated particle has an average particle size of 0.5 to 400 microns.
4. The polishing pad of claim 1, wherein the material has a surface tension of less than 30 dynes/cm.
5. The polishing pad of claim 1, wherein the material is selected from the group comprising: stearic acid, calcium stearate, silicon tetrahydride, tetrafluoroethylene and zinc stearate and mixtures thereof.
6. The polishing pad of claim 1, wherein the polymeric matrix is selected from the group comprising: thermoplastic and thermoset materials.
7. The polishing pad of claim 1, wherein the particle is selected from the group comprising: inorganic oxides, inorganic hydroxides, inorganic hydroxide oxides, organic oxides, organic hydroxides, organic hydroxide oxides, metal borides, metal carbides, metal nitrides, polymer particles and mixtures thereof.
8. A polishing pad useful for polishing a semiconductor substrate, the polishing pad comprising: a polymeric matrix having calcium carbonate particles disposed therein, the

particles being coated with tetrafluoroethylene, the coated particles being capable of releasing from the polishing pad during polishing.

9. A polishing pad useful for polishing a semiconductor substrate, the polishing pad comprising: a polishing layer having a polishing surface, the polishing layer comprising non-abrasive particles disposed in a polymeric matrix, the non-abrasive particles having a surface tension of less than 50 dynes/cm, the non-abrasive particles being capable of releasing from the polishing surface during polishing.

10. A method of chemical mechanical polishing a semiconductor substrate, comprising:
providing a polishing fluid between the substrate and a polishing pad;
providing relative motion and pressure between the substrate and the polishing pad,
wherein the polishing pad comprises: a polishing layer having a polishing surface, the polishing layer comprising particles disposed in a polymeric matrix, the particles being coated with a material having a surface tension of less than 50 dynes/cm, the coated particles being capable of releasing from the polishing surface during polishing.